

Official

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a liquid crystal cell which forms an image display area on a substrate; and a driver for applying a voltage to said liquid crystal cell based on an input video signal, wherein said driver includes a plurality of driver ICs that are mounted on said substrate and a plurality of signal lines, each of the signal lines passing through each of the driver ICs in series, wherein said driver ICs are cascade-connected in series using said signal lines.

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4. (Twice Amended) A liquid crystal display device comprising:

a liquid crystal cell which forms an image display area on a substrate; and a driver for distributing an input video signal to a plurality of driver ICs chain-connected in series using a plurality of signal lines, each of the signal lines passing through each of the driver ICs in series, and for applying a voltage to said liquid crystal cell by employing said driver ICs,

wherein said driver distributes said video signal to said plurality of driver ICs with providing a masking signal from an upstream driver IC to a downstream driver IC of said plurality of driver ICs, wherein said masking signal masks said video signal to be provided by said upstream driver IC.

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6. (Twice Amended) A liquid crystal display device comprising:

a liquid crystal cell which forms an image display area on a substrate; and a driver for distributing an input video signal to a plurality of driver ICs that are cascade-connected, and for applying a voltage to said liquid crystal cell by employing said driver ICs,

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wherein said plurality of driver ICs of said driver are cascade-connected in series by a video transmission line provided on said substrate said video transmission line passing through each of the driver ICs in series, and are controlled by serial data that are transmitted along said video transmission line.

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10. (Twice Amended) A liquid crystal controller comprising:

a receiver for receiving a video signal from a host to display an image;
a sequencer for, upon the receipt of a control signal from said host, generating header information for packet data that are to be output to an LCD driver comprising a plurality of driver ICs and a video transmission line passing through each of the driver ICs in series, wherein said driver ICs are cascade-connected in series; and
output means for converting said video signal received from said receiver into a serial video signal, for adding said header information generated by said sequencer to said serial video signal, and for outputting the resultant serial video signal to the ICs of said LCD driver.

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12. (Twice Amended) A video signal transmission method, for transmitting a video signal to an LCD driver which has a plurality of driver ICs and a video transmission line, comprising the steps of:

transmitting a video signal, including a horizontal blanking period, to said driver ICs in series via a serial interface wherein the video transmission line passes through each of the driver ICs in series, and the driver ICs are cascade connected in series by said video transmission line; and